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Economic Entomology and the National Welfare

THOUGHTFUL men everywhere are coming increasingly to a realization that most of the world's social and political problems are basically economic.

Applied entomology, aside from its medical and sanitary aspects, is primarily concerned with the protection of property. It is, therefore, destined to play an increasingly important part in the preservation and promotion of the general welfare as economic problems loom larger and larger in our national life. However, the "economics of scarcity" idea put certain fallacious ideas into the heads of considerable sections of our population. Although that particular economic philosophy seems now to have gone with the wind, one still hears the argument that, since we are producing an agricultural "surplus," why expend money for control of insect pests which, if not controlled, would reduce that surplus? Why expend public funds taken from suffering taxpayers to devise new methods of pest control, when we are already producing more than the market will take? We as economic entomologists should combat that argument at every opportunity. The fallacy is obviously the assumption that the control of insect pests necessarily results in increasing the total production. What it *really* does is to reduce the unit cost of production. This would either give the producer a larger margin of profit per unit, or provide the consumer with a greater number of units at a lower price; or some combination of the two. Ultimately, because of adjustments due to supply and demand and in the absence of monopolistic control, it would result in lower prices for the consumer and the consequent greater consumption of that commodity, which simply means an increase in the standard of living; a contribution, however small, toward international peace and social stability.

If smaller crops are socially desirable, their regulation certainly cannot wisely be left to insects. It would be better not to plant them in the first place, because the wasted effort which goes into the production of crops for insect consumption is a total social loss. The statement often heard that our problem is one of distribution, not production, is seen then to be only partially correct, for the simple reason that lessening the cost of production results in wider distribution of a commodity because consumers can afford more of it. In other words, insect control raises the standard of living and thus applied entomology contributes directly to a solution of the economic, and indirectly of the political and sociological, problems of the nation.

I wonder sometimes how generally this fact is appreciated by our political, and even by our educational, leadership. Recently the writer had the pleasure of attending a session of the Southern Association of Agricultural Workers. The President has stated that the South is the "number one economic problem of the nation." The program was organized around ten proposed lines of action for solution of that problem. But reducing the cost of production of agricultural commodities was not one of them, and there was not a single economic entomologist on the program. Perhaps, as entomologists, we ought to protest that statue at Enterprise, Alabama, bearing the legend "In profound appreciation of the boll weevil and what it has done as the herald of prosperity." All the desirable economic changes brought on by the coming of the boll weevil could, and would, have been brought on later by the intelligent southern agriculturists, without the waste which now inevitably results from producing cotton bolls for the weevil to eat, or from the expense of controlling it.

No doubt these insect pests do some good, but the good they do is not in the economic but rather in the spiritual realm. Dr. Clarence Poe, able editor of the Pro-

gressive Farmer, several years ago stated, " . . . the coming of the boll-weevil promises to give us on southern farms a greater proportion of men who really love farming. . . . The weevil has greatly intensified the struggle for the 'survival of the fittest' and has caused thousands of the unfit to go into other industries and other sections. . . . From now on, cotton-growing demands alert intelligence. The boll-weevil has speeded up both the passing of the clodhopper and the coming of the up-to-date farmer." Who knows, perhaps in the final reckoning we are indebted to the boll weevil after all.

HARRY S. SMITH

OBITUARIES

Lewie Owen Ellisor, 1910-1939

Lewie Owen Ellisor was born at Willis, Texas, January 18, 1910, and died at Baton Rouge, Louisiana, on October 21, 1939. He entered Texas A. & M. College in the Fall of 1928. In his sophomore year he became interested in entomology and completed the work for a B.S. degree in that subject in 1932. He early showed an interest in toxicology and spent all the time available from his curricular work in assisting in research work in the study of oil emulsions. He exhibited an aptitude for that type of work and also showed a tremendous capacity for detailed and exacting work. He was of a cheerful disposition and was a leader among his fellow students. His summers were spent in research work on cotton insects in the Texas Agricultural Experiment Station.

In 1932 he entered the graduate school of Iowa State College, where he received the M.A. degree in 1934. He published two papers in that year—one on the penetration of gaseous pyridine, peperidine and nicotine into the bodies of insects and the second on the biology and control of *Neosciaria ocellaris* Comstock. He continued in the graduate school of Iowa State College until 1935, when he received the degree of Doctor of Philosophy from that institution.

After graduation he entered the Bureau of Entomology and Plant Quarantine as a junior entomologist and was stationed first at Valdosta, Georgia and later at Uvalde, Texas. While in the Bureau he worked on the effect of pine tar and other repellents to wound infesting blow-flies and published a paper on the results of that work in this journal in 1936.

In September, 1936 he left the Bureau and accepted a position in the Division of Entomology of the Louisiana Experiment Station and remained there until his death. While at Louisiana he worked on the toxicity of stomach poisons to several species of lepidopterous larvae and on the control of the velvet bean caterpillar. The results of both of these studies were published in this journal in 1938.

Mr. Ellisor's life work was cut short but he had published ten papers at the time of his death, all of which exhibited the high quality of his work. He was an enthusiastic worker and communicated this enthusiasm to those with whom he worked. He had a philosophical outlook; and although he knew for a long time before his death that his recovery was impossible he faced the future with a stoicism few possess. He is survived by his wife, Dorothy Ellisor, and one daughter, Jean. Although his promising career was all too brief, he has left behind a memory of faithfulness to duty and of a desire to be helpful to his fellows which will not be soon forgotten.—4-20-40.

S. W. BILSING

Willis Stanley Blatchley, 1859-1940

Willis S. Blatchley, the well-known naturalist and entomologist, died at his home in Indianapolis, May 28, at the age of 80 years. Born in North Madison, Connecticut, October 6, 1859, he was brought to Indiana by his parents the following year.

Doctor Blatchley led an active, useful, and full life. His first earned money was at the age of 18 years when he peddled notions in his home county and counties adjacent. Two years later he became a country school teacher, which vocation he con-

tinued until 1883, when at the age of 24 he entered Indiana University. It was here, under the tutelage of such eminent scientists as David Starr Jordan, John C. Branner, Barten W. Evermann, and Carl H. Eigenmann, that Blatchley became interested in the natural sciences.

Upon graduation he served as Head of the Department of Science in Wiley High School in Terre Haute, Indiana, where he served until 1894, in which year he assumed the office of State Geologist of Indiana. This office he held until his party's defeat in the state election of 1910, after serving sixteen years and leaving such a record of his service in his annual reports as has not been equalled by any incumbent of the office before or since.

From his retirement as State Geologist in 1911 to the present year, his days and nights were occupied with biological studies, especially Entomology, which meant so much to him.

His activities are expressed in his voluminous writings, which totalled 250 titles, many of which were of book size and at least two of them well over 1000 pages each. Books, such as The Coleoptera of Indiana, The Orthoptera of Indiana, Rhynchophora or Weevils of Northeastern America (with Leng), The Orthoptera of Northeastern America, and Heteroptera or True Bugs of Eastern North America, are well known and used by entomologists. His nature books are equally well-known and include such titles as A Nature Wooing at Ormond by the Sea, Woodland Idyles, My Nature Nook, and In Days Agone.

Doctor Blatchley was outstanding as a geologist, entomologist, and naturalist. In the field of entomology he achieved greatness not only because he covered such a large field, but especially because his treatises were written in a language understandable to all.

The funeral services, held at Indianapolis, were conducted by J. J. Davis of Purdue University, as had been requested by Doctor Blatchley. The body was cremated and the ashes buried beside the body of his wife at his winter home in Dunedin, Florida.

REVIEW

A Laboratory Guide in Entomology for Introductory Courses, by Robert Matheson, vii+135 pages, numerous text figures. Comstock Publishing Co., Inc. Ithaca, N. Y. 1939.

This outline of laboratory studies for introductory courses will unquestionably meet the needs of many instructors. It consists of a total of twenty-eight studies which include a consideration of the Crustacean type, external structure, internal structure, mouth parts, metamorphosis, identification of insects, wing vernation, insect adaptations, musical or sound producing organs; social life; insects as pollinators; insects in relation to human, domestic animal, and plant diseases; the problem of insect control. The appendix is devoted to a consideration of collecting, preparing, mounting, preserving, and rearing of insects. A glossary occupies the last three pages.

The author is to be commended for his efforts. The outline has many admirable features. These include perforated pages which facilitates removal; also marginal holes which will enable students to use loose leaf binder. There is included 48 plates and 222 figures. These constitute a splendid feature as they are large and prepared in an excellent manner. The student has only to identify and label parts thereby eliminating the objectionable drawing feature.

Introductory courses in entomology are variable and many instructors may find this outline deficient in certain studies which they incorporate in their course. The guide can doubtless be broadened to overcome this criticism.

The reviewer feels that the overstress placed on insect keys constitutes a weakness. This is true because students pursuing such work will doubtless be required to purchase Comstock's "Introduction to Entomology" or a similar text book. Such books include ample keys. It would seem logical to eliminate adult keys and incorporate keys on immature stages. The latter phase of entomology is sorely neglected in foundational work.

The price of the key is too high for general adoption. Authors and publishers should keep this constantly in mind and endeavor to avoid publishing laboratory guides that sell for more than one dollar to one dollar and twenty-five cents per copy.

JOHN T. CREIGHTON, *University of Florida.*

Principles de Zoologie Agricole, by Paul Vayssière, Professor in the "Institut national d'Agronomie de la France d'Outre-mer." Pages 222, figures 24. 16-mo. Librairie Armand Colin, Paris. 1940. 15 francs.

This little book deals almost entirely with the problems of economic entomology. Except to use them in illustration of methods and principles, individual pests are not discussed.

In simple and at the same time perfectly scientific language the problems of insect control are presented to the reader. Following the general discussion of the subject are to be found treatments of the subjects of host-resistance, climate and other environmental factors influencing the development and persistence of pests. Dispersion is briefly but adequately discussed and the migratory habit is considered along with the phase theory.

Artificial control is presented under the headings of cultural and general agricultural practices, biological agencies in control, physical methods of control and the utilization of insecticides.

A general summary includes discussion of quarantines, eradication campaigns and governmental activies in insect control.

The author shows himself to be familiar with the problems and practices in the United States and draws freely on experiences in this country to illustrate many of the insect activities and control measures under discussion.

The book is brief, concise and entirely adequate. We have, in this country, nothing which will quite cover the ground in anything like the same space. The French is simple and the book should be ideal for the student who wishes to improve his reading knowledge of French in the field of Entomology. An English translation would doubtless find wide use.

FLORIDA ENTOMOLOGICAL CONFERENCE

The Fifth Annual Florida Entomological Conference, sponsored by The Newell Entomological Society, was held in Gainesville, Florida, on March 22 and 23.

The Conference was in celebration of the fiftieth anniversary of the teaching phase of Entomology in the South. The meetings opened with a Symposium on Teaching and Dr. John T. Creighton, Head of the Department of Entomology of The University of Florida, served as leader. Dr. Herbert Osborn of Ohio State University, Dr. Z. P. Metcalf of North Carolina State College, Dr. Harcourt A. Morgan of The Tennessee Valley Authority, and Dr. C. L. Metcalf of The University of Illinois were symposium speakers. Mr. John M. Fredrick and Mr. Dan Fogarty, of the Newell Entomological Society, presided over the March 21 afternoon session. Other speakers presenting talks and papers were Mr. James P. Toffaleti, University of Florida. Mr. K. E. Bragdon, Winter Haven, Florida, and Dr. Homer Hixson, University of Florida.

The annual banquet was held in The Florida Union and was given in honor of Dr. Harcourt A. Morgan, pioneer teacher of entomology, formerly head of The Department of Entomology at Lousiana State College, Head of the Department of Entomology at the University of Tennessee, Dean of the College of Agriculture and Director of the Experiment Station at the University of Tennessee, President of the University of Tennessee. Dr. Morgan is now Chairman of the Tennessee Valley Authority. Dr. H. Harold Hume, Dean of The College of Agriculture, served as toastmaster. Speakers included Dr. John J. Tigert, President, University of Florida, Dr. Wilmon Newell, Provost of Agriculture, University of Florida, Dr. H. A. Morgan, Dr. Arthur Gibson, Canadian Entomologist, Dr. C. L. Metcalf, University of Illinois.

Dr. Arthur Gibson of Canada and Dr. C. L. Metcalf of Illinois were presented in an informal radio interview broadcast over State and University of Florida Radio Station WRUF on Saturday at noon. This was a special feature of The College of Agriculture Farm Hour.

CURRENT NOTES

Pacific Slope Branch Meets at Seattle

The 25th annual meeting of the Pacific Slope Branch of the Association is to be held at the University of Washington, at Seattle, on June 20, 21 and 22, 1940.

A total of 40 papers on a wide range of subjects indicates an interesting program. There will be a joint session on Thursday morning, the 20th, with the Pacific Northwest Association of Horticulturists, Entomologists and Plant Pathologists, the American Society of Horticultural Science, Pacific Section, and the American Phytopathological Society, Pacific Division.

The Pacific Slope Branch was organized 25 years ago at Berkeley, California, and a session will be held on Friday afternoon especially to celebrate the 25th anniversary. At this time Dr. E. O. Essig will give an address on the History and Development of the Pacific Slope Branch.

On Saturday morning there will be exhibits and demonstrations of spraying and dusting machinery at the Western Washington Experiment Station at Puyallup.

Headquarters for the meetings are at the Edmond Meany Hotel.

Roy E. Campbell, *Secretary*
Pacific Slope Branch.

R. R. Reppert Dies

Mr. R. R. Reppert, Extension Entomologist of Texas since 1920, died of heart failure on March 13, 1940. A more extended account of the entomological activities of Mr. Reppert will be published later.

Eastern Branch Summer Meeting

The Eastern Branch of the Association will hold an informal summer meeting at the Nature Study Camp of the Pennsylvania State College on August 1 and 2, 1940.

All entomologists and their friends, whether affiliated with the Eastern Branch or not, are cordially invited to attend. Registration will begin at 1:30 P.M. at the Zoology Building, State College, Pa., and departure will be made for the camp at 4:30. The camp is situated some sixteen miles from State College and guides will be left at the College to direct late comers.

Formal programs will be reduced to a minimum but talks by Dr. E. H. Dusham, Dr. C. F. W. Muesebeck, Professor George R. Green, Director of the camp, Dr. S. W. Frost and Professor J. R. Pepper will occupy the evening hours. The daytime will be devoted to such activities as the many and varied attractions of the region suggest to the visitors.

Those who plan to stay at the camp will bring their own blankets, pillows and bed linen. There will be a charge of $2.50 per person for meals. The use of the cabinets will be free.

Reservations are desirable and should be sent to Mr. Harry B. Weiss, State Department of Agriculture, Trenton, N. J., as soon as possible.

Dr. R. L. Post at Oregon State College

Dr. R. L. Post, formerly with Ward's Natural Science Establishment at Rochester, New York, is now located at Oregon State College, Corvallis. Dr. Post is employed as technician and curator in the Department of Entomology